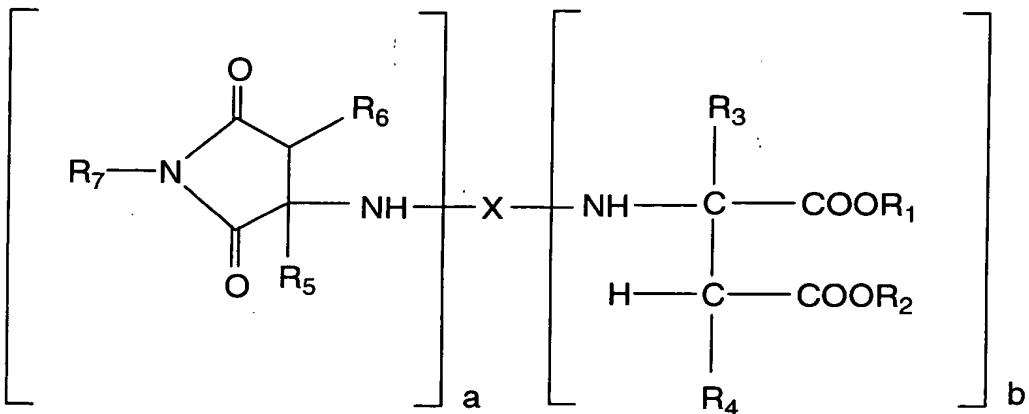


WHAT IS CLAIMED IS:

1. An aspartate of the formula:



5 where

X represents an m-valent organic residue obtained by removing the primary amino group or groups from a di- or polyamine containing primary amino groups and having a number average molecular weight of 60 to 6000, and which may contain further functional groups that either are reactive with isocyanate groups or are inert to isocyanate groups at temperatures of up to 100°C,

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R₃ and R₄ may be identical or different and represent hydrogen or organic groups which are inert towards isocyanate groups at a temperature of 100°C or less,

R₁ and R₂ may be identical or different and represent organic groups which are inert towards isocyanate groups at a temperature of 100°C or less,

R₅ and R₆ may be the same or different and represent moieties selected from the group consisting of i) hydrogen, ii) straight or branched C₁ to C₈ alkyl groups, which may be substituted

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with up to three aryl groups containing from 6 to 10 carbon atoms, iii) C₆ to C₁₀ aryl groups, which may be substituted with up to three alkyl groups having from 1 to 3 carbon atoms, and iv) together form a six-membered cycloalkyl group, with said cycloalkyl group being substituted with from 0 to 3 alkyl groups having from 1 to 3 carbon atoms,

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R₇ represents a moiety selected from the group consisting of i) hydrogen, ii) straight or branched C₁ to C₈ alkyl groups, which may be substituted with up to three aryl groups containing from 6 to 10 carbon atoms, and iii) C₆ to C₁₀ aryl groups, which may be substituted with up to three alkyl groups having from 1 to 3 carbon atoms,

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a and b represent integers of from 1 to 5, provided that the sum of a and b is from 2 to 6.

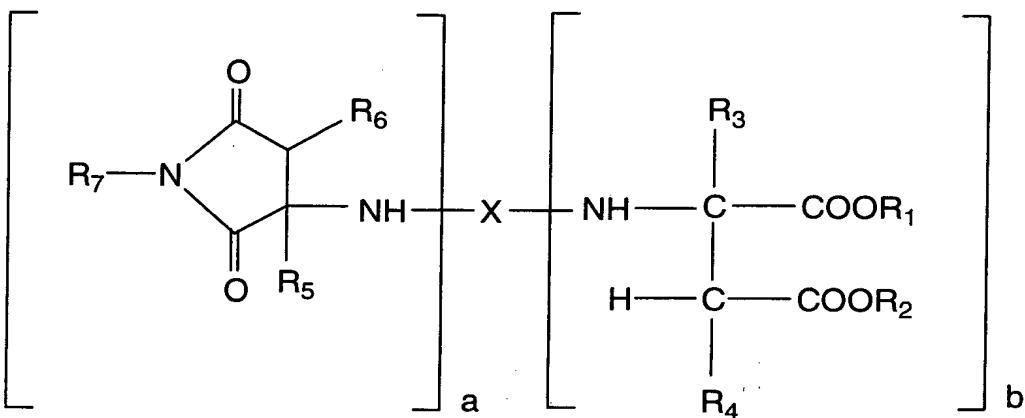
2. The aspartate of Claim 1, wherein X represents a divalent hydrocarbon group obtained by removing the amino groups from 1-amino-20 3-aminomethyl-3,5,5-trimethyl-cyclohexane (isophorone diamine or IPDA), bis-(4-aminocyclohexyl)-methane, bis-(4-amino-3-methylcyclohexyl)-methane, 1,6-diamino-hexane, 2-methyl pentamethylene diamine, ethylene diamine or 3,3'-[1,2-ethanediylbis(oxy)]bis (1-propaneamine).

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3. The aspartate of Claim 1, wherein R₃ and R₄ are hydrogen.

4. The aspartate of Claim 1, wherein R₁ and R₂ are each alkyl groups having from 1 to 8 carbon atoms.

5. A process for preparing an aspartate of the formula:



where

- 5 X represents an m-valent organic residue obtained by removing the primary amino group or groups from a di- or polyamine containing primary amino groups and having a number average molecular weight of 60 to 6000, and which may contain further functional groups that either are reactive with isocyanate groups or are inert to isocyanate groups at temperatures of up to 100°C,
- 10
- 15 R₃ and R₄ may be identical or different and represent hydrogen or organic groups which are inert towards isocyanate groups at a temperature of 100°C or less,
- R₁ and R₂ may be identical or different and represent organic groups which are inert towards isocyanate groups at a temperature of 100°C or less,
- 20 R₅ and R₆ may be the same or different and represent moieties selected from the group consisting of i) hydrogen, ii) straight or branched C₁ to C₈ alkyl groups, which may be substituted with up to three aryl groups containing from 6 to 10 carbon atoms, iii) C₆ to C₁₀ aryl groups, which may be substituted

with up to three alkyl groups having from 1 to 3 carbon atoms, and iv) together form a six-membered cycloalkyl group, with said cycloalkyl group being substituted with from 0 to 3 alkyl groups having from 1 to 3 carbon atoms,

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R₇ represents a moiety selected from the group consisting of i) hydrogen, ii) straight or branched C₁ to C₈ alkyl groups, which may be substituted with up to three aryl groups containing from 6 to 10 carbon atoms, and iii) C₆ to C₁₀ aryl groups, which may be substituted with up to three alkyl groups having from 1 to 3 carbon atoms,

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a and b represent integers of from 1 to 5, provided that the sum of a and b is from 2 to 6,

15 comprising

A) reacting at a temperature of 0 to 100°C, in solution or in the absence of a solvent and at an equivalent ratio of primary amino groups in component a) to C=C double bonds in component b) of from about 1.1:1 to about 3.0:1

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a) di- or polyamines corresponding to formula (II)



with

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b) compounds corresponding to formula (III)



wherein

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X, R₁, R₂, R₃ and R₄ are as defined above and

m represents an integer of from 2 to 6, and

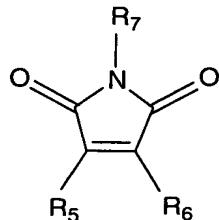
B) reacting the resultant product with a maleimide.

6. The process of Claim 5, wherein X represents a divalent hydrocarbon group obtained by removing the amino groups from 1-amino-5-3-aminomethyl-3,5,5-trimethyl-cyclohexane (isophorone diamine or IPDA), bis-(4-aminocyclohexyl)-methane, bis-(4-amino-3-methylcyclohexyl)-methane, 1,6-diamino-hexane, 2-methyl pentamethylene diamine, ethylene diamine or 3,3'-[1,2-ethanediylbis(oxy)]bis (1-propaneamine).

10 7. The process of Claim 5, wherein R₃ and R₄ are hydrogen.

8. The process of Claim 5, wherein R₁ and R₂ are each alkyl groups having from 1 to 8 carbon atoms.

15 9. The process of Claim 5, wherein said maleimide is of the formula:



where R₅ , R₆ and R₇ are as defined above.

20 10. A two-component coating composition which comprises, as binder,

- a) a polyisocyanate component and
- b) an isocyanate-reactive component containing

 - b1) the aspartate of Claim 1,
 - b2) optionally other isocyanate-reactive compounds,

25 wherein the equivalent ratio of isocyanate groups to isocyanate-reactive groups is from about 0.8:1 to about 2.0:1.

11. A prepolymer containing urea, urethane, allophanate and/or biuret structures comprising the reaction product of a polyisocyanate with the aspartate of Claim 1.